Hepatitis A

Agent: Hepatitis A virus (HAV), a member of the Picornavirus family

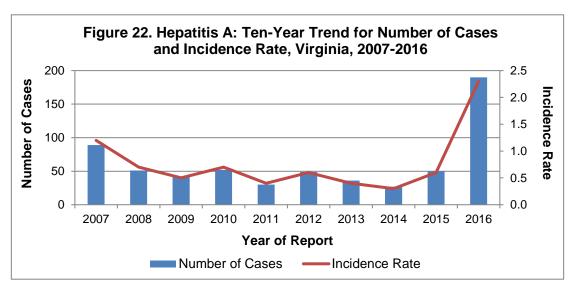
<u>Mode of Transmission</u>: Ingestion of food or water contaminated by fecal matter or through close contact with an infected household member or sex partner.

<u>Signs/Symptoms</u>: Fever, malaise, nausea, abdominal discomfort, dark urine, joint pain, and jaundice. In older children and adults, symptoms usually occur for several weeks, though prolonged or relapsing liver disease can last up to six months. Younger children often exhibit no symptoms.

<u>Prevention</u>: Preventive measures include immunization, safe food preparation, and good personal hygiene (e.g., washing hands with soap after using the bathroom, after changing diapers, and before preparing and eating food). Administration of immune globulin (IG) or single-antigen vaccine as soon as possible after exposure to hepatitis A can protect against symptomatic infection. <u>Other Important Information</u>: This is an acute illness only; chronic infection does not occur. A vaccine was first introduced in 1995 and is currently recommended for all children at the age of one year, persons who are at increased risk of infection (i.e., international travelers), and persons who are at increased risk for developing complications from hepatitis A.

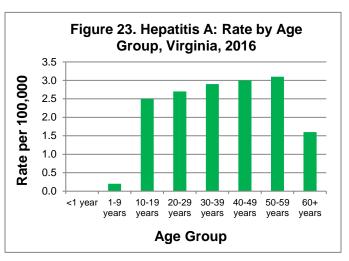
| Hepatitis A: 2015 Data Summary | |
|---------------------------------|-------|
| Number of Cases: | 190 |
| 5-Year Average Number of Cases: | 38.4 |
| % Change from 5-Year Average: | +395% |
| Incidence Rate per 100,000: | 2.3 |

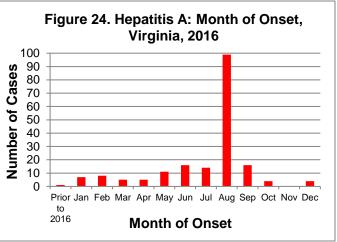
In 2016, 190 cases of hepatitis A were reported in Virginia. This represents an 280% increase from the 50 cases reported in 2015, and is 395% higher than the five-year average of 38.4 cases per year (Figure 22). As explained below, 131 of the cases were associated with outbreaks, leaving 59 sporadic cases reported for the year, which is higher than but more consistent with data from recent years.



Cases were reported among people ranging in age from 9 to 95 years. The incidence rate was highest in the 50-59 year age group (3.1 per 100,000). Rates among the other affected age groups ranged from 0.2 to 3.0 per 100,000, with an incremental increase in age groups from 10 to 59 years. No cases were reported in children less than one year of age (Figure 23). Race information was not reported for 24% of cases. Among cases with a known race, the incidence rate was highest in the white population (2.0 per 100,000) compared to rates observed in the black and "other" race populations (0.9 and 1.2 per 100,000, respectively). The incidence rate among females (2.4 per 100,000) was higher than the rate among males (2.1 per 100,000).

By region, incidence was highest in the northwest region (4.5 per 100,000) and lowest in the southwest region (0.9 per 100,000). Incidence by locality can be seen in the map below. Although cases occurred throughout the year, 52% had illness onset during the month of August (Figure 24). This spike in cases can be





attributed to one of two hepatitis A outbreaks described below. One death, in an adult female over 60 years of age, was attributed to hepatitis A during 2016.

The increase in cases over the 5-year average is attributable to two outbreaks. A foodborne outbreak of hepatitis A occurred in 2016 involving 110 cases; 108 were primary cases and 2 were secondary cases. Sixty-one cases (55%) occurred in females and 49 cases (45%) occurred in males. The age range of patients involved in the outbreak was 14 to 70 years (average: 36 years). Illness onset occurred May through October, with the majority of illness onsets occurring in August. Cases were identified in all regions of the state except for the southwest region. The cause of the outbreak was contaminated strawberries imported from Egypt that were consumed by patients in commercially-available smoothies.

Another hepatitis A outbreak was reported in the northwest region involving person-to-person transmission through close interaction involving sexual contact, household contact, and recreational drug use. Twenty-one patients were identified as part of the outbreak; 13 were male and 8 were female. Persons involved in the outbreak ranged from 9 to 78 years of age (average: 40 years). The onset of illness occurred January through September.

Excluding the 131 (69%) cases associated with the two outbreaks, 14 cases (7%) reported traveling outside of the country prior to illness, or were contacts of someone who traveled outside the country.

Hepatitis A Incidence Rate by Locality Virginia, 2016

